REMARKS

The March 2004 Office Action rejected claims 1-4 and 19-20 under Section 103(a) as unpatentable over Ballantyne et al. (U.S. Patent 5,867,821, hereafter "Ballantyne") and in view of Stone III et al. (U.S. Patent 5,630,174, hereafter "Stone"). Claims 5-8 were rejected under Section 103(a) as unpatentable over Ballantyne, Stone and Tolopka (U.S. Patent 6,044,349). Claim 9 was rejected under Section 103(a) as unpatentable over Ballantyne, Stone, and Chuang (U.S. Patent 5,551,012). Claims 10-16 were rejected over Ballantyne, Stone and Nguyen (U.S. Patent 6,401,157). Finally, claims 17-18 were rejected over Ballantyne, Stone, and Tolopka.

Turning now to independent claims 1 and 19 which were rejected under 35 U.S.C. 103(a) as being unpatentable over Ballantyne et al. (U.S. Patent 5,867,821, hereafter "Ballantyne") and in view of Stone III et al. (U.S. Patent 5,630,174, hereafter "Stone").

As per claim 1, the Office Action asserted that:

> Ballantine shows "A handheld device" at Fig. 1, element 10, by showing the PDA, comprising: "removable, replaceable, and upgradeable modules including a removable, replaceable, upgradeable, and re-writeable Personal Universal Memory card capable of receiving and storing information associated with a user from a server" at col. 10, lines 58-67, col. 11, lines 8-9, col. 12, lines 35-37 and col. 14, lines 13-19 by reading/writing the health card, utilizing standardized PCMCIA card slots, updating health card and inserting the health card.
>
> Ballantyne does not specifically teach "a motherboard having sockets to accept the replaceable, and upgradeable modules", though Ballantyne teaches PCMCIA slot for health card at Fig. 6 and col. 14, lines 13-15.
>
> However, Stone teaches a motherboard having PCMCIA adapter sockets at Fig. 2, elements 200 and 212-218.
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> It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Stone's reference with Ballantyne's teaching by designing PCMCIA slots docketed on the motherboard because by doing so the communication of the PCMCIA channels would bypass the host system for efficient peripheral i/o and cpu performance.

As per claim 19, the Office Action noted that Ballantyne teaches:

> "a computer program product for implementing, in a handheld device wirelessly coupled with a server, a method of initiating a user session with the server from the handheld
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> device, the computer program product" at Fig. 1 and the abstract;
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> "a computer-readable medium carrying executable instructions that, when executed,
>
> are capable of performing the acts of: identifying the presence of a Personal Universal Memory card in the handheld device" at col. 11, lines 2-4 by identifying

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patient through the uniqueness of the health card; "requesting initiation of a user session after the user has been verified as being the owner of the Personal Universal Memory card in the device" at col. 11, lines 5-11 by registering patient through initialization session; and "receiving and storing, at the handheld device, configuration information that the handheld device allows to be downloaded to it" at col. 11, line 2-4 and 12, lines 37-41 by transferring update information of patient's record to the appropriate work station by tracking the location of the patient.

Applicant respectfully traverses the Section 103(a) rejection. Applicant notes that the present rejection does not establish *prima facie* obviousness under 35 U.S.C. § 103 and M.P.E.P. §§ 2142-2143. The Examiner bears the initial burden to establish and support *prima facie* obviousness. *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976). To establish *prima facie* obviousness, three basic criteria must be met. M.P.E.P. § 2142.

> First, the Examiner must show some suggestion or motivation, either in the cited references or in the knowledge generally available to one of ordinary skill in the art, to modify the reference so as to produce the claimed invention. M.P.E.P. § 2143.01; *In re Fine*, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Second, the Examiner must establish that there is a reasonable expectation of success for the modification. M.P.E.P. § 2142. Third, the Examiner must establish that the prior art references teach or suggest all the claim limitations. M.P.E.P. §2143.03; *In re Royka*, 180 U.S.P.Q. 580 (CCPA 1974).
> Finally, the teachings, suggestions, and reasonable expectations of success must be found in the prior art, rather than in Applicant's disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (CAFC 1991).

Applicant respectfully submits that a *prima facie* case of obviousness has not been met because the Examiner's rejection fails on all three of the above requirements. Further, the Office Action did not establish that the prior art references teach or suggest all the claim limitations. M.P.E.P. § 2143.03.

Turning now to references mentioned in the Office Action, Ballantyne relates to the distribution and administration of medical services, entertainment services, electronic medical records, educational information, etc. to a user's (not necessarily a patient's) individual electronic patient care station (PCS) interconnected to a master library (ML) which stores data in digital compressed format, through a local medical information network. In none of the lines cited from Ballantyne is there mention of a process for authenticating ownership of the PCMCIA card prior to activating a user session to ensure that it is in fact the patient who is accessing the system, and not someone in possession of the patient's PCMCIA card. In other words, any user

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of the PCMCIA card, patient or otherwise, can access the server. In the Applicant's method, ownership of the Personal Universal Memory card is first authenticated to ensure security of the user session.

Although Ballantyne shows a handheld with a PCMCIA slot, Ballentyne fails to show that its major or core modules, including, but not limited to, the graphics and sound controller, system memory, Central Processing Unit (CPU), and modem, are removable, replaceable and upgradeable. Stone relates to a personal computer motherboard having PCMCIA slots 212-214 that can receive PCMCIA cards 216-218. However, Stone relates to PC bus expansion slots and not removable, replaceable, and upgradeable core modules, including, but not limited to, the graphics and sound controller, system memory, CPU, and modem. Furthermore, neither Ballentyne nor Stone show the use of a PCMCIA card to replace or upgrade a core module, including, but not limited to, the graphics and sound controller, system memory, CPU, and modem.

Thus, as to claim 1, Applicant notes that neither Ballantyne nor Stone shows removable, replaceable, and upgradeable modules including a removable, replaceable, upgradeable, and re-writeable Personal Universal Memory card capable of receiving and storing information associated with its owner from a server; and a motherboard having sockets to accept the replaceable, and upgradeable modules, wherein, based on the information associated with the user and on information about the device's user-determined hardware configuration, the server determines and downloads only applications that can be supported by the user-determined configuration of removable, replaceable, and upgradeable modules.

As noted in the Summary Section of the instant case, since the major or core modules of the handheld computer are removable, replaceable, and upgradeable, the advantages are as follows:

> As indicated above, because of its removable, replaceable, and upgradeable component-based architecture, the cost of this device is manageable and therefore, the device itself is virtually disposable. This device also does not permanently house critical user information, and therefore is disposable for this reason as well, and is useable by multiple users in sequence. Critical user information is stored on a removable, replaceable, and upgradeable Personal Universal Memory Card (PUM Card), the size of a credit card that this device will accept. Third, three critical processes ensure the privacy and security of user information while a user is operating the device.
> Thus, the device is user-dependent and will be "slave" to the user whose Personal Universal Memory Card is inserted into it. The three processes that ensure the privacy

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and security of user information are the Biometric Identity Scanning Process for authenticating that the user is the owner of the PUM Card inserted into the device, the Private Communication Process for ensuring secure transactions with the servers and other devices, and the Smart-Erase Shutdown Process for ensuring that the contents of a PUM Card left in a device are erased so its contents are not accessible by hackers.

Another advantage of the device is that it contains a Configuration-Dependent Download Process that ensures efficient operation of the device. An application will only be downloaded to a device if the device's configuration matches those required by the application for efficient operation on the device.

Ballantyne uses a conventional handheld computer in a medical environment, while Stone shows a conventional personal computer with PCMCIA expansion slots. Applying Stone to Ballantyne, one skilled in the art would have arrived at a handheld system with a pre-configured core capability with the PCMCIA expansion slots designed to supplement, but not replace, the preconfigured core capability. The combination is still a conventional handheld computer with PCMCIA expansion slots, not a shell whose capabilities can be customized by the user who can select replaceable and upgradeable core modules such as processor, graphics controller, and sound controller, for example, which in combination yield a specific system configuration that eliminates the need to carry multiple PCMCIA cards.

In both Ballantyne and Stone, the components, such as processors and graphics controller and sound controllers, are soldered into the motherboard and the functionality and configuration are predetermined in advance. The Ballantyne/Stone devices are potentially upgradeable, but not replaceable, by PCMCIA cards. Furthermore, Ballantyne shows a system accessible by any user of the PCMCIA card, not just the owner of the card. Ballantyne singly or in combination with Stone simply does not show the removable, replaceable, and upgradeable core modules, including, but not limited to, a graphics and sound controller, system memory, CPU, modem, and a removable, replaceable, upgradeable, and re-writeable Personal Universal Memory card capable of receiving and storing information associated with its owner from a server; and a motherboard having sockets to accept the replaceable, and upgradeable modules.

Further, neither Ballantyne nor Stone shows "a motherboard having sockets to accept the replaceable, and upgradeable modules, wherein, based on the information associated with the user and on the user-determined hardware configuration of the device through user-selected replaceable, and upgradeable modules, the server determines and downloads only applications that can be supported by the user-determined configuration of removable, replaceable, and

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upgradeable modules". Because the Applicant's system has so much flexibility, the system requires application software that is geared toward a specific hardware configuration formed by the user. The Configuration-Dependent Download Process customizes the handheld to the user-determined hardware configuration. To do this, the server determines and downloads only applications that can be supported by a user-determined configuration of removable, replaceable, and upgradeable core modules. Thus, neither Ballantyne nor Stone shows the claimed determining and downloading only applications that can be supported by a user-determined configuration of removable, replaceable, and upgradeable core modules.

Since two elements are missing from the references, neither Ballantyne nor Stone can render claims 1, 17 and 19 and any of the dependent claims obvious. Withdrawal of the rejection is requested.

Additionally, the Office Action failed to identify a reasonably successful modification to Ballantyne using the Stone teaching to arrive at the claimed method for a handheld device with removable, replaceable, and upgradeable core modules including, but not limited to, the graphics and sound controller, system memory, CPU, modem, and a removable, replaceable, upgradeable, and re-writeable Personal Universal Memory card capable of receiving and storing information associated with its owner from a server; and a motherboard having sockets to accept the replaceable, and upgradeable modules, wherein, based on the information associated with the user and on information about the device's user-determined hardware configuration, the server determines and downloads only applications that can be supported by a user-determined configuration of removable, replaceable, and upgradeable modules. Hence claim 1 and those dependent therefrom are patentable over the prior art.

Similarly, claims 19-20 are patentable over Ballantyne and Stone since, as discussed above, none of the references shows a computer program product for implementing, in a handheld device wirelessly coupled with a server, a method of initiating a user session with the server from the handheld device, the computer program product comprising: a computer-readable medium carrying executable instructions that, when executed, are capable of performing the acts of: identifying the presence of a Personal Universal Memory card in the handheld device; requesting initiation of a user session after the user has been verified as being the owner of the Personal Universal Memory card in the device; and receiving and storing, at the handheld device, information and/or applications that the handheld device allows to be

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downloaded to it, and determining and downloading only information and/or applications that can be supported by a user-determined configuration of removable, replaceable, and upgradeable modules.

As per claim 17, the Office Action noted that:

Ballantyne teaches "computer network that includes a server wirelessly communicating with one or more wireless handheld devices, a method of permitting a particular user to access the computer network from any of the handheld devices" at Fig. 1, elements 6, the nursing station as the server and element 10 the hand-held device communicating with the server through PCS wirelessly as shown in Fig. 6, elements 100 and 102 and at col. 4, lines 65-67 by communicating servers on the computer network.

Ballantyne teaches the following:

"requiring that a Personal Universal Memory card be inserted into the device, requiring" the user's information matches the "information stored on the Personal Universal Memory card, and maintaining at the server unique customer identifiers associated with users" at Fig. 6, elements "Health Card" and PCS, and col. 10, line 58 - col. 11,line 11 by describing reading and writing health card by matching uniqueness of the patient.

Ballantyne does not specifically teach the biometric information to identify the users.

However, Tolopka teaches "wherein the cryptographic key is used to securely store the user's biometric scan on the Personal Universal Memory card for later comparison against user scans conducted for activating a user-session or for conducting transactions" at col. 3, lines 36-42 by using encrypted personal identification and/or biometric code stored on the smart card.

It would have been obvious to one having ordinary skill in the art at the time of the applicant's invention was made to combine Tolopka and Stone's references with Ballantyne's teaching by enabling health card with biometric information for identifying user because by doing so the health card would have been the one only for all purposes smart card with high security of protection such that consumers need to carry would not have to acquire a plurality of cards.

Tolopka further teaches "maintaining at the servers unique identifiers associated with a plurality of users of the computer network and establishing the user session without regard to any specific handheld device" at col. 1, lines 53-60 and col. 3, lines 36-42 by using encrypted security password and encrypted personal identification on the smart card.

Ballantyne relates to a portable storage medium that can be used by any user to access information from the server. Ballantyne therefore does not ensure uniqueness of the patient, as would the PUM card, which requires biometric verification of its ownership. Instead, Ballantyne ensures a unique user session with its method of identification, regardless of whether or not the user is the owner of the portable storage medium. In contrast, the Applicant shows a portable

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storage medium whose ownership by the user must be verified through a biometric scan before access to a user session is granted.

Tolopka relates to a portable storage medium used to store data and provide access to information from an information dissemination system (IDS).   As discussed above, in both Ballantyne and Stone, the major or core components such as CPU, memory, video and sound controllers, among others, are soldered into the motherboard and the functionality is predetermined in advance. Ballantyne singly or in combination with Stone simply does not show removable, replaceable, and upgradeable core modules.   Tolopka similarly fails to show the removable, replaceable, and upgradeable modules such as the processor, graphics and audio controllers, among others.

Moreover, Tolopka also fails to show determining and downloading only applications that can be supported by a user-determined configuration of removable, replaceable, and upgradeable core modules, and establishing the user session without regard to any specific handheld device. As discussed above, because the Applicant's system has so much flexibility, the system requires application software that is geared toward a specific hardware configuration formed by the user. The Configuration-Dependent Download Process customizes the handheld to the user-determined hardware configuration. To do this, the server determines and downloads only applications that can be supported by a user-determined configuration of removable, replaceable, and upgradeable core modules.

Since at least the removable, replaceable, and upgradeable modules and the determining and downloading only applications that can be supported by a user-determined configuration of removable, replaceable, and upgradeable core modules, claim 17 and those dependent therefrom are patentable over Ballantyne and Tolopka.

In sum, the Office Action did not establish and support *prima facie* obviousness of independent claims 1, 17 and 19 as required in *In re Rinehart*, 189 U.S.P.Q. 143 (CCPA 1976) because each of the three basic criteria was not met with (i) some suggestion or motivation to modify Ballantyne with the references, (ii) a reasonable expectation of success, and (iii) teach or suggest all the claim limitations in Applicant's claims 1, 17 and 19. Furthermore, no *apriori* knowledge existed to rationally derive claims 1, 17 and 19 as required in *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (CCPA 1970). Hence, claims 1, 17 and 19 as well as those dependent therefrom, are patentable over the references.

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CONCLUSION

Applicant believes that the above discussion is fully responsive to all grounds of rejection set forth in the Office Action.

If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone Applicant's attorney at (408) 528-7490.

Respectfully submitted,

Bao Tran
Reg. No. 37,955

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